Space Weather Highlights
29 July - 04 August 2024

SWPC PRF 2553
05 August 2024

Solar activity was at high levels throughout the period. A total of 63 M-flares (51 R1-Minor events, 12 R2-Moderate events) and one X-flare (R3-Strong event) were observed during the course of the week from 13 unique regions. The largest event was an impulsive X1.5/2b flare at 29/0237 UTC, with associated 300 sfu Tenflare and 535 km/s Type-II sweep, from Region 3766.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity reached G1 (Minor) storm levels on 30 Jul-01 Aug due to the arrival and passage of multiple CMEs that left the Sun over 27-29 Jul. G1-G3 (Minor-Strong) storm periods were observed on 04 Aug following the arrival of a CME that left the Sun on 01 Aug. Quiet and quiet to unsettled levels were observed throughout the remainder of the period.

Space Weather Outlook
05 August - 31 August 2024

Solar activity is expected to be at moderate to high levels throughout the outlook period. M-class flares are expected with a chance for X-class flares through 31 Aug.

There is a slight chance for S1 (Minor) solar radiation storms throughout the outlook period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels.

An Isolated period of G1 (Minor) storms are possible on 05 Aug due to waning CME influences. Geomagnetic field activity is expected to be mostly quiet and quiet to unsettled over 06-31 Aug.

Daily Solar Data

Date	Radio Flux 10.7cm	Sun spot No.	Sunspot Area (10^{-6} hemi.)	X-ray Background Flux	Flares							
					X-ray			Optical				
					C	M	X	S	1	2	3	4
29 July	223	211	1720	C2.4	13	6	1	31	2	1	0	0
30 July	220	261	1910	C3.0	5	8	0	34	1	1	0	0
31 July	235	271	2540	C4.8	4	9	0	46	4	0	0	0
01 August	234	260	2360	C6.1	5	13	0	42	2	0	0	0
02 August	247	232	1890	C5.3	7	12	0	20	0	0	0	0
03 August	245	217	1840	C3.1	7	9	0	12	0	1	0	0
04 August	241	194	1830	C3.2	7	6	0	8	1	0	0	0

Daily Particle Data

Date	Proton Fluence (protons/cm ^{2} -day -sr)		Electron Fluence (electrons/cm^2 -day -sr)
	>1 MeV	>10 MeV	>2MeV
29 July	4.5e+06	1.7e+04	2.6e+07
30 July	5.8e+06	1.6e+04	1.4e+06
31 July	1.3e+06	1.5e+04	1.1e+06
01 August	1.4e+06	1.7e+04	1.2e+06
02 August	2.7e+06	1.7e+04	1.0e+06
03 August	1.2e+06	1.6e+04	1.2e+06
04 August	1.5e+06	1.6e+04	8.8e+05

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
29 July	7	2-1-1-2-3-2-2-1	13	2-3-1-5-3-1-2-1	6	2-2-1-2-2-1-2-2
30 July	18	4-4-3-4-3-3-2-2	35	5-5-6-5-4-3-2-2	23	4-5-4-4-3-3-2-2
31 July	13	2-2-2-2-2-3-4-4	12	2-2-2-1-4-3-3-3	17	2-2-2-2-3-4-5-4
01 August	22	4-5-4-3-4-3-2-2	21	5-5-4-3-3-2-2-1	22	5-5-4-3-3-3-3-2
02 August	9	2-2-2-2-3-2-2-3	10	2-2-1-2-4-3-2-2	9	3-3-2-2-2-2-2-3
03 August	9	1-2-0-3-3-2-2-2	19	2-3-0-4-3-5-2-3	10	2-3-*-2-3-2-2-3
04 August	28	2-3-4-5-5-4-4-4	47	4-3-4-5-6-7-4-3	12	3-4-5-4-7-6-4-4

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
29 Jul 0235	ALERT: X-ray Flux exceeded M5	29/0234
29 Jul 0251	SUMMARY: 10cm Radio Burst	29/0233 - 0234
29 Jul 0251	ALERT: Type II Radio Emission	29/0236
29 Jul 0253	SUMMARY: X-ray Event exceeded X1	29/0233 - 0243
29 Jul 1255	ALERT: X-ray Flux exceeded M5	29/1252
29 Jul 1317	SUMMARY: X-ray Event exceeded M5	29/1247 - 1304
29 Jul 1319	ALERT: Type II Radio Emission	29/1301
29 Jul 1320	SUMMARY: 10cm Radio Burst	29/1251 - 1255
29 Jul 1336	ALERT: Type IV Radio Emission	29/1316
29 Jul 1449	ALERT: Type IV Radio Emission	29/1421
29 Jul 1955	ALERT: X-ray Flux exceeded M5	29/1952
29 Jul 2017	SUMMARY: X-ray Event exceeded M5	29/1940 - 2010
29 Jul 2024	WATCH: Geomagnetic Storm Category G3 predicted	
29 Jul 2335	WARNING: Geomagnetic Sudden Impulse expected	30/0000 - 0100
30 Jul 0018	WARNING: Geomagnetic K = 4	30/0005 - 1500
30 Jul 0019	ALERT: Geomagnetic K = 4	
30 Jul 0019	WARNING: Geomagnetic K = 5	30/0019 - 0600
30 Jul 0027	SUMMARY: Geomagnetic Sudden Impulse	30/0002
30 Jul 0409	ALERT: Geomagnetic K = 5	
30 Jul 0534	EXTENDED WARNING: Geomagnetic K = 4	30/0005 - 31/0300
30 Jul 0534	EXTENDED WARNING: Geomagnetic K = 5	30/0019 - 1500
30 Jul 1936	ALERT: X-ray Flux exceeded M5	30/1932
30 Jul 1956	SUMMARY: 10cm Radio Burst	30/1928 - 1945
30 Jul 2009	SUMMARY: X-ray Event exceeded M5	30/1925 - 2004
31 Jul 0644	ALERT: X-ray Flux exceeded M5	31/0640
31 Jul 0706	SUMMARY: X-ray Event exceeded M5	31/0628 - 0658
31 Jul 1302	ALERT: X-ray Flux exceeded M5	31/1259
31 Jul 1350	SUMMARY: X-ray Event exceeded M5	31/1245 - 1326
31 Jul 1448	WARNING: Geomagnetic K = 4	31/1449 - 01/0300

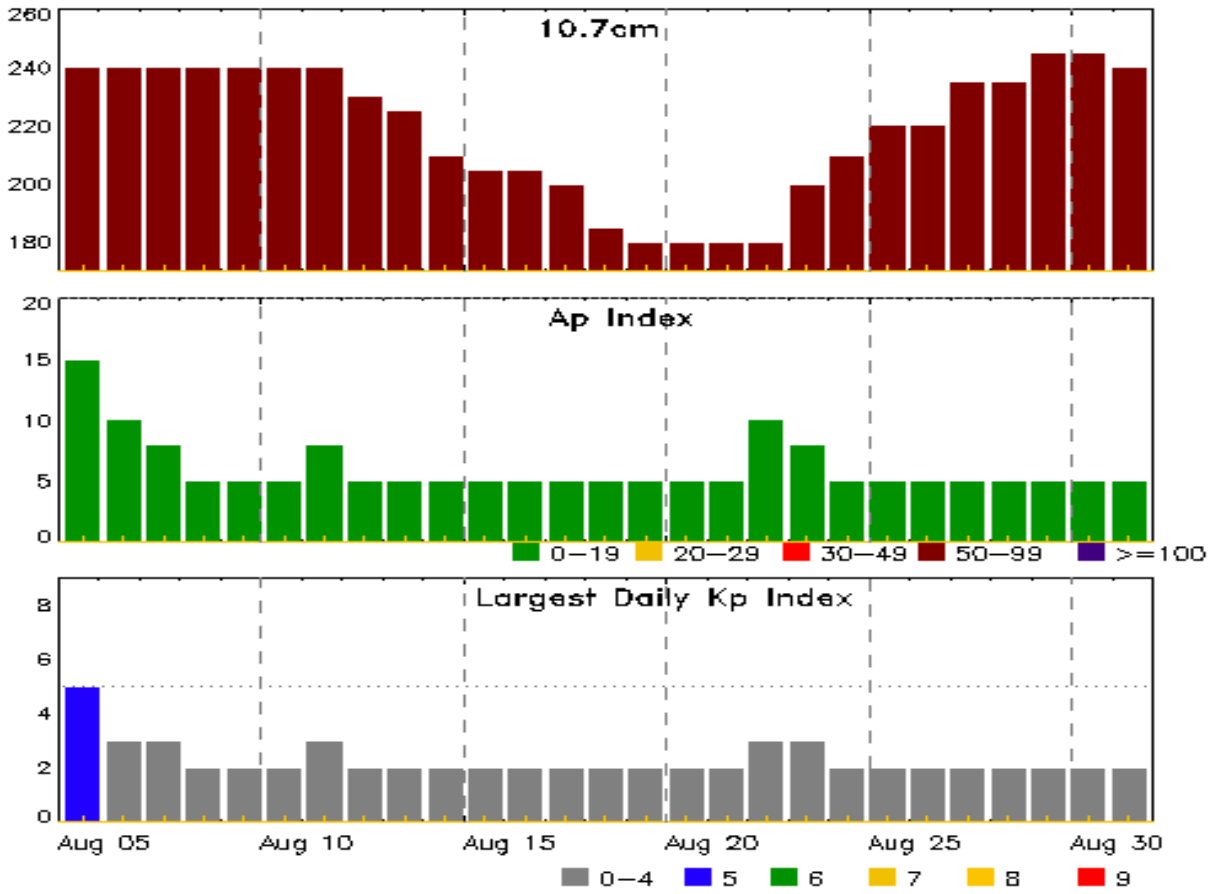
Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
31 Jul 1701	ALERT: Geomagnetic K = 4	
31 Jul 1835	ALERT: X-ray Flux exceeded M5	31/1831
31 Jul 1847	ALERT: Type IV Radio Emission	31/1831
31 Jul 1858	ALERT: Type II Radio Emission	31/1820
31 Jul 1900	SUMMARY: 10cm Radio Burst	31/1821 - 1839
31 Jul 1903	SUMMARY: X-ray Event exceeded M5	31/1805 - 1858
31 Jul 1911	WARNING: Geomagnetic K = 5	31/1911 - 01/0300
31 Jul 2019	ALERT: Geomagnetic K = 5	
01 Aug 0151	ALERT: X-ray Flux exceeded M5	01/0147
01 Aug 0204	ALERT: Geomagnetic K = 5	
01 Aug 0212	SUMMARY: X-ray Event exceeded M5	01/0147 - 0154
01 Aug 0244	EXTENDED WARNING: Geomagnetic K = 4	31/1449 - 01/2100
01 Aug 0244	EXTENDED WARNING: Geomagnetic K = 5	31/1911 - 01/1800
01 Aug 0607	ALERT: Geomagnetic K = 5	
01 Aug 0652	SUMMARY: 10cm Radio Burst	01/0439 - 0441
01 Aug 0703	ALERT: X-ray Flux exceeded M5	01/0701
01 Aug 0740	ALERT: Type II Radio Emission	01/0712
01 Aug 0741	SUMMARY: 10cm Radio Burst	01/0702 - 0720
01 Aug 0747	SUMMARY: X-ray Event exceeded M5	01/0623 - 0739
01 Aug 0749	ALERT: Type IV Radio Emission	01/0708
01 Aug 1728	WATCH: Geomagnetic Storm Category G2 predicted	
01 Aug 1949	EXTENDED WARNING: Geomagnetic K = 4	31/1449 - 02/0600
02 Aug 0445	ALERT: X-ray Flux exceeded M5	02/0441
02 Aug 0515	ALERT: Type II Radio Emission	02/0449
02 Aug 0523	ALERT: Type IV Radio Emission	02/0457
02 Aug 0537	SUMMARY: X-ray Event exceeded M5	02/0423 - 0535
02 Aug 0559	SUMMARY: 10cm Radio Burst	02/0502 - 0520
03 Aug 1842	ALERT: X-ray Flux exceeded M5	03/1838
03 Aug 1855	SUMMARY: X-ray Event exceeded M5	03/1829 - 1844

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
03 Aug 1930	ALERT: X-ray Flux exceeded M5	03/1928
03 Aug 1948	SUMMARY: X-ray Event exceeded M5	03/1917 - 1943
03 Aug 2026	SUMMARY: 10cm Radio Burst	03/1838 - 1838
04 Aug 0337	WARNING: Geomagnetic K = 4	04/0336 - 1500
04 Aug 0559	ALERT: Geomagnetic K = 4	
04 Aug 0605	WARNING: Geomagnetic K = 5	04/0605 - 1500
04 Aug 0856	ALERT: Geomagnetic K = 5	
04 Aug 1243	ALERT: Geomagnetic K = 5	
04 Aug 1248	EXTENDED WARNING: Geomagnetic K = 5	04/0605 - 05/0300
04 Aug 1248	EXTENDED WARNING: Geomagnetic K = 4	04/0336 - 05/0600
04 Aug 1249	WARNING: Geomagnetic K = 6	04/1248 - 2359
04 Aug 1401	ALERT: Geomagnetic K = 6	
04 Aug 1447	WARNING: Geomagnetic K>= 7	04/1445 - 1800
04 Aug 1502	ALERT: Geomagnetic K = 7	
04 Aug 1536	ALERT: Geomagnetic K = 5	
04 Aug 1646	ALERT: Geomagnetic K = 6	
04 Aug 2234	ALERT: Type II Radio Emission	04/2208

Twenty-seven Day Outlook



Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index
05 Aug	240	15	5	19 Aug	180	5	2
06	240	10	3	20	180	5	2
07	240	8	3	21	180	5	2
08	240	5	2	22	180	10	3
09	240	5	2	23	200	8	3
10	240	5	2	24	210	5	2
11	240	8	3	25	220	5	2
12	230	5	2	26	220	5	2
13	225	5	2	27	235	5	2
14	210	5	2	28	235	5	2
15	205	5	2	29	245	5	2
16	205	5	2	30	245	5	2
17	200	5	2	31	240	5	2
18	185	5	2				

Energetic Events

	Time			X-ray		Optical Information			Peak Radio Flux		Sweep Freq Intensity	
Date	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	245	2695	II	IV
29 Jul	0233	0237	0243	X1.5	0.067	2B	S05W04	3764	2900	300	2	
29 Jul	0510	0520	0528	M1.0	0.009	SF	S14W36	3768	870			
29 Jul	1216	1222	1229	M1.6	0.010	SF	S11W56	3762				
29 Jul	1247	1255	1304	M8.7	0.054			3762		400	1	1
29 Jul	1404	1446	1509	M4.2	0.100			3772				
29 Jul	1940	1957	2010	M6.4	0.071			3772		160		
29 Jul	2055	2100	2106	M1.1	0.007	SF	S14W48	3768				
30 Jul	0052	0103	0120	M1.7	0.004			3762				
30 Jul	0120	0125	0130	M1.2	0.010			3762				
30 Jul	0130	0132	0136	M1.3	0.005			3762				
30 Jul	0135	0140	0144	M1.4	0.008			3766				
30 Jul	0616	0629	0646	M1.5	0.004	SF	S07W13	3766				
30 Jul	1612	1628	1642	M1.5	0.003	1F	S08W27	3766				
30 Jul	1910	1920	1925	M1.9	0.006	SN	S04W29	3764	2500			
30 Jul	1925	1938	2004	M9.4	0.160	2N	S24E64	3772		310		
31 Jul	0143	0150	0154	M1.9	0.007			3773	540			
31 Jul	0507	0523	0538	M4.7	0.046	SF	S04E83	3774				
31 Jul	0628	0646	0658	M7.7	0.081			3768	120	120		
31 Jul	1245	1305	1326	M6.0	0.016	1N	S22E55	3772		110		
31 Jul	1326	1332	1337	M4.4	0.031			3774				
31 Jul	1610	1631	1641	M1.4	0.018			3774				
31 Jul	1807	1837	1857	M5.4	0.110	SF	S15W71	3768	200	900	2	2
31 Jul	2136	2155	2210	M1.2	0.003	SF	S15W71	3768				
31 Jul	2242	2250	2259	M1.0	0.004			3774				
01 Aug	0050	0058	0103	M1.2	0.008			3770	180			
01 Aug	0147	0150	0154	M6.3	0.021			3773	66000	210		
01 Aug	0258	0306	0314	M1.2	0.010			3774				
01 Aug	0359	0409	0423	M1.9	0.022			3774				
01 Aug	0435	0441	0445	M4.0	0.013			3765	570	570		
01 Aug	0552	0556	0600	M1.5	0.007			3768	210			
01 Aug	0623	0709	0739	M8.2	0.200	1N	S16W74	3768	1000	500	2	2
01 Aug	1109	1137	1141	M4.1	0.067	SF	S16W80	3768		110		
01 Aug	1604	1615	1619	M1.0	0.009	SF	S05W53	3764				
01 Aug	1633	1637	1644	M1.3	0.003	SF	S08W41	3765				
01 Aug	1722	1729	1734	M1.3	0.007	SF	S03E63	3774				
01 Aug	2012	2022	2032	M1.2	0.011	SF	S13E63	3774				
01 Aug	2300	2308	2317	M1.4	0.011	SF	S21E37	3772				
02 Aug	0154	0201	0208	M1.0	0.007			3765				

Energetic Events

	Time			X-ray		Optical Information			Peak Radio Flux		Sweep Freq Intensity	
Date	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	245	2695	II	IV
02 Aug	0317	0325	0331	M1.1	0.003			3772				
02 Aug	0353	0358	0403	M1.1	0.006			3768	1500			
02 Aug	0423	0455	0535	M7.3	0.230	SF	S23E32	3772				
02 Aug	0423	0455	0535	M7.4	0.230			3768				
02 Aug	0751	0759	0803	M2.1	0.010	SF	S08W48	3765	330			
02 Aug	0908	0916	0928	M1.2	0.012	SF	S26E32	3772				
02 Aug	0945	0951	0955	M1.6	0.008	SN	S06W57	3766				
02 Aug	1228	1233	1238	M1.2	0.006	SF	S08W79	3773				
02 Aug	1344	1350	1400	M1.1	0.009	SN	N19E43	3775				
02 Aug	1521	1530	1535	M1.5	0.009	SN	S06W60	3766				
02 Aug	2341	2358	0022	M1.3	0.028							
03 Aug	0022	0027	0032	M1.0	0.007	SF	S10E64	3777				
03 Aug	0445	0459	0505	M1.5	0.011	SF	N09W59	3770				
03 Aug	0652	0705	0711	M1.5	0.005			3770				
03 Aug	0711	0730	0734	M1.9	0.023			3770				
03 Aug	1326	1343	1355	M1.8	0.019	2N	S09E44	3774		330		
03 Aug	1649	1654	1658	M2.8	0.003			3770				
03 Aug	1713	1726	1734	M1.9	0.002			3766				
03 Aug	1829	1839	1844	M7.3	0.026			3775				
03 Aug	1917	1930	1943	M5.4	0.060							
04 Aug	0145	0159	0217	M1.4	0.002			3781				
04 Aug	0948	1001	1003	M1.1	0.005			3766				
04 Aug	1003	1008	1012	M1.4	0.008			3766				
04 Aug	1027	1050	1124	M1.9	0.060	SF	S18W71	3781				
04 Aug	1511	1515	1519	M2.2	0.007	SN	S09E69	3780		260		
04 Aug	2204	2211	2215	M1.0	0.004	SN	S09E66	3780	760	220	3	

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
29 Jul	0107	0130	0136	C8.9	SF	S10W48	3762
29 Jul	0136	0139	0143	C9.2	SF	S09W52	3762
29 Jul	0215	0219	0224	C6.8	SF	S09E15	3767
29 Jul	0232	0235	0307	X1.5	2B	S05W04	3766
29 Jul	0308	0308	0309		SF	S05W03	3766
29 Jul	0313	0314	0315		SF	N09E09	3770
29 Jul	0340	0344	0350	C9.4	SF	N09E09	3770
29 Jul	0416	0420	0427		SF	N09E09	3770
29 Jul	0510	0520	0528	M1.0	SF	S14W36	3768
29 Jul	0620	0624	0631	C4.3	SF	S09E13	3767
29 Jul	0749	0756	0807	C3.7	SF	S06W05	3766
29 Jul	0904	0910	0925		SF	N09E07	3770
29 Jul	1137	1138	1140		SF	S18W37	3768
29 Jul	1146	1146	1150		SF	S15W38	3768
29 Jul	1206	1212	1216	C7.3	SF	S08E10	3767
29 Jul	1216	1222	1229	M1.6	SF	S11W56	3762
29 Jul	1247	1255	1304	M8.7			3762
29 Jul	1343	1347	1351	C6.1			3762
29 Jul	1346	1347	1350		SF	S16W43	3768
29 Jul	1359	1404	1407		SF	S09W05	3766
29 Jul	1400	1440	1704		1N	S09W03	3765
29 Jul	1404	1446	1509	M4.2			3772
29 Jul	1407	1424	1640		1N	S12W04	3765
29 Jul	1537	1538	1546		SF	S10W49	3762
29 Jul	1612	1612	1616		SF	S15W46	3768
29 Jul	1705	1714	1720	C6.5	SF	S10E01	3765
29 Jul	1718	1718	1718		SF	S16W37	3768
29 Jul	1725	1725	1728		SF	S17W45	3768
29 Jul	1733	1745	1754	C9.3	SF	S11W01	3765
29 Jul	1758	1800	1806		SF	S05W09	3766
29 Jul	1905	1914	1925		SF	S05W09	3766
29 Jul	1912	1922	1926	C9.4	SF	S14W47	3768
29 Jul	1920	1921	1925		SF	N10E02	3770
29 Jul	1928	1934	1940	C7.0			3766
29 Jul	1940	1957	2010	M6.4			3772
29 Jul	1947	2007	2023		SF	S24E78	3766
29 Jul	2003	2005	2009		SF	S10W60	3762
29 Jul	2055	2100	2106	M1.1	SF	S14W48	3768

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
29 Jul	2209	2222	2230	C9.9	SF	S05W17	3766
30 Jul	0052	0103	0120	M1.7			3762
30 Jul	0120	0125	0130	M1.2			3762
30 Jul	0130	0132	0136	M1.3			3762
30 Jul	0135	0140	0144	M1.4			3766
30 Jul	0535	0610	0642		SF	S23E65	3762
30 Jul	0600	0628	0654		SF	S12W65	3762
30 Jul	0616	0629	0646	M1.5	SF	S07W13	3766
30 Jul	0646	0654	0717		SF	N20E37	3769
30 Jul	0706	0717	0724	C9.0			3766
30 Jul	0752	0755	0759	C5.8			
30 Jul	0929	0931	0934		SF	S08W10	3765
30 Jul	1034	1037	1045		SF	S12W65	3762
30 Jul	1119	1120	1125		SF	S06W24	3766
30 Jul	1122	1122	1127		SF	S23E66	3772
30 Jul	1221	1227	1239		SF	N10W08	3770
30 Jul	1222	1222	1229		SF	S23E66	3772
30 Jul	1232	1233	1259		SF	S08W25	3766
30 Jul	1402	1403	1406		SF	S23E65	3772
30 Jul	1403	1404	1405		SF	S17W55	3768
30 Jul	1414	1425	1447		SF	N08W09	3770
30 Jul	1428	1429	1437		SF	N08W09	3770
30 Jul	1446	1449	1503		SF	S16W54	3768
30 Jul	1448	1450	1455		SF	S17W55	3768
30 Jul	1451	1454	1458		SF	S11W71	3762
30 Jul	1522	1532	1538	C7.9	SF	S08W26	3766
30 Jul	1601	1601	1610		SF	S08W27	3766
30 Jul	1612	1628	1642	M1.5	1F	S08W27	3766
30 Jul	1625	1625	1638		SF	S17W56	3768
30 Jul	1638	U1640	A1647		SF	N08W09	3770
30 Jul	1700	1710	1722	C7.4			3766
30 Jul	1729	1730	1750		SF	S05W24	3766
30 Jul	1758	1801	1835		SF	N21E30	3769
30 Jul	1910	1920	1925	M1.9	SN	S04W29	3764
30 Jul	1925	1938	2004	M9.4	2N	S24E64	3772
30 Jul	1940	1943	1955		SF	N09W12	3770
30 Jul	1958	2003	2005		SF	S08W29	3766
30 Jul	2007	2011	2016		SF	S08W29	3766

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
30 Jul	2010	2010	2014		SF	S16W58	3768
30 Jul	2059	2059	2101		SF	S23E61	3772
30 Jul	2135	2143	2152	C9.7	SF	S07W42	3773
30 Jul	2145	2153	2203		SF	S15W46	3768
30 Jul	2214	2214	2221		SF	S05W27	3766
30 Jul	2258	2307	2321		SF	S05W27	3766
31 Jul	0000	0000	0041		SF	S08W09	3767
31 Jul	B0041	0041	0104		SF	S12W74	3762
31 Jul	B0041	0041	0047		SF	S14W58	3768
31 Jul	B0057	0058	0100		SF	S24E59	3772
31 Jul	0143	0150	0154	M1.9			3773
31 Jul	0235	0241	0507	C4.8			3770
31 Jul	0507	0523	0538	M4.7	SF	S04E83	3774
31 Jul	B0516	U0524	0719		SF	S08W13	3767
31 Jul	0527	0533	0537		SF	S13W79	3762
31 Jul	0534	0540	0543		SF	S22E59	3772
31 Jul	0602	0602	0604		SF	S07W33	3766
31 Jul	0628	0646	0658	M7.7			3768
31 Jul	0631	0631	0636		SF	S09W33	3766
31 Jul	0632	0632	0716		SF	S22E59	3772
31 Jul	0645	0645	0650		SF	N19E70	
31 Jul	0724	0747	0755		SF	S08W13	3767
31 Jul	0724	0724	0730		SF	S10W16	3765
31 Jul	0730	0731	0737		SF	N09W19	3770
31 Jul	0751	0751	0755		SF	S22E57	3772
31 Jul	0751	0759	0816		SF	N10W20	3770
31 Jul	0811	0814	0821		SF	S22E57	3772
31 Jul	0914	0914	0914		SF	S22E57	3772
31 Jul	0926	0932	0940		SF	N19E70	
31 Jul	0950	0957	1005		SF	N19E70	3772
31 Jul	0954	0955	0957		SF	S22E57	3772
31 Jul	0959	1002	1007		SF	S22E57	3772
31 Jul	1001	1019	1053	C9.3	SF	N10W20	3770
31 Jul	1010	1014	1024		SF	S22E57	3772
31 Jul	1025	1110	1119		SF	S22E57	3772
31 Jul	1031	1035	1039	C8.9			3762
31 Jul	1035	1035	1044		SF	S09W14	3767
31 Jul	1121	1148	1209		SF	S22E55	3772

Flare List

Date	Time			X-ray	Optical		
	Begin	Max	End	Class	Imp/ Brtns	Location Lat CMD	Rgn #
31 Jul	1136	1137	1141		SF	S14W62	3768
31 Jul	1215	1222	1228		SF	N19E70	
31 Jul	1245	1305	1326	M6.0			3772
31 Jul	1246	1252	1314		SF	S10W37	3766
31 Jul	1247	1305	1423		1N	S22E55	3772
31 Jul	1326	1332	1337	M4.4			3774
31 Jul	1351	1353	1410		SN	S05W38	3764
31 Jul	1351	1351	1430		1F	S23E53	3772
31 Jul	1352	1353	1405		SF	S05W38	3766
31 Jul	1352	1443	1500		SF	S15W65	3768
31 Jul	1542	1544	1550		SF	S16W62	3768
31 Jul	1556	1558	1600		SF	S16W62	3768
31 Jul	1610	1631	1641	M1.4			3774
31 Jul	1619	U1619	A1641		SF	S15W68	3768
31 Jul	1620	1620	1623		SF	S15W70	3762
31 Jul	1628	1628	1631		SF	S23E54	3772
31 Jul	1658	1705	1710		SF	S15W71	3768
31 Jul	1807	1837	1857	M5.4	SF	S15W71	3768
31 Jul	1940	1942	1947		SF	N20E15	3769
31 Jul	2012	2014	2016		SF	S15W71	3768
31 Jul	2056	2057	2101		SF	S08W42	3766
31 Jul	2106	2113	2140	C8.6	1F	S24E50	3772
31 Jul	2128	2139	2148		SF	S15W71	3768
31 Jul	2136	2155	2210	M1.2			3767
31 Jul	2140	2148	2211		1F	S09W22	3767
31 Jul	2150	2151	2157		SF	S15W71	3768
31 Jul	2242	2250	2259	M1.0			3774
01 Aug	0001	0008	0012	C9.3			3770
01 Aug	0028	0033	0041	C8.3			3774
01 Aug	0050	0058	0103	M1.2			3770
01 Aug	0137	0142	0146	C8.3			3762
01 Aug	0147	0150	0154	M6.3			3773
01 Aug	0258	0306	0314	M1.2			3774
01 Aug	0359	0409	0423	M1.9			3774
01 Aug	0435	0441	0445	M4.0			3765
01 Aug	0513	0514	0533		SF	S12W35	3766
01 Aug	0518	0518	0523		SF	S15W74	3768
01 Aug	0522	0533	0540		SF	S12W35	3765

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
01 Aug	0525	0539	0551		1F	S21E46	3772
01 Aug	0528	0554	0602		SF	S16W74	3768
01 Aug	0552	0556	0600	M1.5			3768
01 Aug	0554	0555	0601		SF	S12W35	3765
01 Aug	0605	0606	0613		SF	S16W74	3768
01 Aug	0617	0617	0620		SF	S07W26	3767
01 Aug	0623	0709	0739	M8.2			3768
01 Aug	0628	0632	0633		SF	N10W20	3770
01 Aug	0628	0714	0749		1N	S16W74	3768
01 Aug	0644	0653	0703		SF	S09W44	3766
01 Aug	0651	0656	0700		SF	S13W36	3765
01 Aug	0656	0657	0706		SF	S21E44	3772
01 Aug	0758	0758	0801		SF	S21E46	3772
01 Aug	0807	0807	0812		SF	S13W37	3765
01 Aug	0813	0829	0953		SF	S21E45	3772
01 Aug	0932	0932	0938		SF	S06W34	3765
01 Aug	1025	1025	1034		SF	S04E65	3774
01 Aug	1039	1041	1052		SF	S21E44	3772
01 Aug	1055	1055	1119	M4.1	SF	S16W80	3768
01 Aug	1227	1238	1246		SF	S16W79	3768
01 Aug	1252	1257	1306		SF	S06W34	3765
01 Aug	1307	1314	1315		SF	S19E44	3772
01 Aug	1331	1335	1342		SF	S07W45	3766
01 Aug	1410	1415	1441		SF	S16W79	3768
01 Aug	1420	1420	1425		SF	S08W33	3767
01 Aug	1422	1433	1441		SF	S05E64	3774
01 Aug	1426	1439	1452		SF	S15W79	3768
01 Aug	1506	1507	1510		SF	S15W79	3768
01 Aug	1511	1515	1520	C8.8	SF	S15W79	3768
01 Aug	1542	1543	1546		SF	S03E64	3774
01 Aug	1604	1615	1619	M1.0	SF	S05W53	3764
01 Aug	1633	1637	1644	M1.3	SF	S08W41	3765
01 Aug	1702	1705	1709		SF	S03E65	3774
01 Aug	1722	1729	1734	M1.3	SF	S03E63	3774
01 Aug	1749	1749	1752		SF	N00E00	3768
01 Aug	1801	1801	1806		SF	S22E37	3772
01 Aug	1848	1855	1903	C8.5	SF	S21E38	3772
01 Aug	1950	1958	2106		SF	S28E41	3772

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
01 Aug	2012	2022	2032	M1.2	SF	S13E63	3774
01 Aug	2055	2058	2101		SF	S08E65	3774
01 Aug	2101	2103	2105		SF	S11W40	3765
01 Aug	2111	2129	2143		SF	S33E45	3772
01 Aug	2300	2308	2317	M1.4	SF	S21E37	3772
02 Aug	0154	0201	0208	M1.0			3765
02 Aug	0240	0250	0317	C9.1			3774
02 Aug	0317	0325	0331	M1.1			3772
02 Aug	0353	0358	0403	M1.1			3768
02 Aug	0415	0421	0423	C7.3			3765
02 Aug	0423	0455	0535	M7.3			3768
02 Aug	0423	0455	0535	M7.4			3768
02 Aug	0621	0634	0648		SF	S22E33	3772
02 Aug	0651	0655	0736		SF	S08W48	3765
02 Aug	0708	0710	0725		SF	S04E56	3774
02 Aug	0751	0759	0803	M2.1	SF	S08W48	3765
02 Aug	0820	0821	0823		SF	S07W76	3773
02 Aug	0908	0916	0928	M1.2	SF	S26E32	3772
02 Aug	0938	0942	0950		SF	S11E54	3774
02 Aug	0945	0951	0955	M1.6	SN	S06W57	3766
02 Aug	1014	1015	1020		SF	S23E32	3772
02 Aug	1107	1110	1122	C8.9	SF	S13W52	3765
02 Aug	1123	1125	1128		SF	S09E72	3777
02 Aug	1200	1208	1223		SF	S06W58	3766
02 Aug	1228	1233	1238	M1.2	SF	S08W79	3773
02 Aug	1254	1301	1306	C9.9	SF	S22E29	3772
02 Aug	1344	1350	1400	M1.1	SN	N19E43	3775
02 Aug	1521	1530	1535	M1.5	SN	S06W60	3766
02 Aug	1611	1621	1632	C8.6	SF	S25E25	3772
02 Aug	1707	1713	1736	C6.1			3768
02 Aug	1812	1819	1826	C8.2	SF	S04E49	3765
02 Aug	1822	1823	1827		SF	S11W61	3765
02 Aug	1838	1839	1844		SF	S13W57	3765
02 Aug	2341	2358	0022	M1.3			
03 Aug	0022	0027	0032	M1.0	SF	S10E64	3777
03 Aug	0141	U0143	0151		SF	N11W57	3770
03 Aug	0251	0258	0310	C9.3	SF	S07E44	3774
03 Aug	0445	0459	0505	M1.5	SF	N09W59	3770

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
03 Aug	B0511	U0523	0549	C6.9	SF	N09W57	3770
03 Aug	0619	0649	0652	C9.0			3770
03 Aug	0652	0705	0711	M1.5			3770
03 Aug	0711	0730	0734	M1.9			3770
03 Aug	0931	0934	0937		SF	S06W60	3766
03 Aug	1027	1032	1044	C6.6	SF	S11W66	3765
03 Aug	1030	1036	1055		SF	N11W62	3770
03 Aug	1051	1052	1056		SF	S11W66	3765
03 Aug	1225	1229	1233	C4.6			
03 Aug	1326	1343	1355	M1.8	2N	S09E44	3774
03 Aug	1453	1456	1458		SF	S22E10	3772
03 Aug	1500	1500	1503		SF	S11W66	3765
03 Aug	1528	1529	1531		SF	S06W60	3766
03 Aug	1601	1608	1615	C6.6			3766
03 Aug	1649	1654	1658	M2.8			3770
03 Aug	1713	1726	1734	M1.9			3766
03 Aug	1829	1839	1844	M7.3			3775
03 Aug	1917	1930	1943	M5.4			
03 Aug	2252	2302	2316	C8.7			
04 Aug	0036	0046	0145	C6.5			3766
04 Aug	0145	0159	0217	M1.4			3781
04 Aug	0549	0555	0559	C5.7			3781
04 Aug	0757	0808	0815	C5.6	1F	N21W30	3769
04 Aug	0900	0907	0917	C5.7			3766
04 Aug	0948	1001	1003	M1.1			3766
04 Aug	1003	1008	1012	M1.4			3766
04 Aug	1004	1006	1009		SF	S23E05	
04 Aug	1027	1050	1124	M1.9	SF	S18W71	3781
04 Aug	1243	1244	1250		SF	N21W34	
04 Aug	1255	1257	1302		SF	S24E02	
04 Aug	1318	1326	1331	C8.5	SF	S24E01	3766
04 Aug	1450	1458	1505	C6.1			3767
04 Aug	1511	1515	1519	M2.2	SN	S09E69	3780
04 Aug	2115	2116	2123		SF	S22W11	3772
04 Aug	2149	2154	2200	C4.6			3780
04 Aug	2204	2211	2215	M1.0	SN	S09E66	3780

Region Summary

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3756												
16 Jul	S18E68	66	40	2	Hsx	1	A								
17 Jul	S18E54	67	100	5	Hsx	1	A								
18 Jul	S17E40	67	100	3	Hsx	1	A								
19 Jul	S26E25	68	90	1	Cso	2	B				1				
20 Jul	S18E13	68	100	2	Hsx	1	A								
21 Jul	S17W00	67	100	2	Hsx	1	A								
22 Jul	S17W14	67	100	2	Hsx	1	A								
23 Jul	S17W27	68	90	2	Hsx	1	A								
24 Jul	S17W41	69	80	2	Hsx	1	A								
25 Jul	S17W55	70	60	1	Hsx	1	A								
26 Jul	S17W70	71	60	4	Hsx	1	A								
27 Jul	S18W80	68	80	5	Hsx	1	A								
28 Jul	S17W92	67	30	3	Hsx	1	A								
								0	0	0	1	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 67

			Region 3757												
16 Jul	N17E74	60	30	2	Hsx	1	A								
17 Jul	N18E60	61	60	3	Hax	1	A								
18 Jul	N18E47	60	40	2	Hsx	1	A				1				
19 Jul	N17E33	60	20	2	Cso	3	B				1				
20 Jul	N17E22	59	40	5	Cao	5	B				1				
21 Jul	N17E08	58	40	5	Cao	5	B		1		1				
22 Jul	N18W06	59	40	6	Cao	5	B								
23 Jul	N17W19	60	30	4	Hrx	2	A								
24 Jul	N17W32	60	10	1	Hrx	1	A								
25 Jul	N16W46	61	10	1	Hrx	1	A								
26 Jul	N18W61	62	10	1	Axx	1	A								
27 Jul	N18W74	62	10	1	Axx	1	A								
28 Jul	N18W88	63	plage												
								0	1	0	4	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 59

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3762												
20 Jul	S14E64	17	50	8	Cao	3	B								
21 Jul	S13E51	15	130	9	Dao	8	B	2			2				
22 Jul	S13E37	16	170	14	Eai	14	BGD	9	3		11	1			
23 Jul	S12E24	17	220	13	Eai	25	BGD				1				
24 Jul	S12E10	18	230	14	Eai	29	BGD	5			5				
25 Jul	S12W04	19	230	16	Fac	35	BGD	4			5	2			
26 Jul	S12W20	20	240	16	Fac	36	BGD	3			8				
27 Jul	S12W30	18	330	18	Fkc	31	BGD	1	2		5	2			
28 Jul	S11W45	20	440	18	Fkc	25	BGD	1	3		6	2			
29 Jul	S10W59	21	230	11	Eac	16	BG	3	2		5				
30 Jul	S11W73	22	180	11	Eac	8	BG		3		4				
31 Jul	S11W87	22	180	10	Dac	7	BG	1			3				
								29	13	0	55	7	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 19

			Region 3763												
22 Jul	N03E70	343	80	2	Hsx	1	A								
23 Jul	N03E61	340	110	5	Dso	2	B								
24 Jul	N03E48	340	100	9	Cso	2	B								
25 Jul	N03E34	341	100	8	Cso	2	B								
26 Jul	N03E24	342	120	9	Cso	2	B								
27 Jul	N03E08	340	160	8	Cso	3	B								
28 Jul	N02W06	341	120	9	Cso	2	B								
29 Jul	N04W20	342	110	8	Cso	2	B								
30 Jul	N02W34	343	70	3	Hsx	2	A								
31 Jul	N05W49	344	60	3	Hsx	1	A								
01 Aug	N05W64	346	60	3	Hsx	1	A								
02 Aug	N05W79	348	60	3	Hsx	1	A								
03 Aug	N05W91	347	60	2	Hsx	1	A								
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 341

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Region 3764													
22 Jul	S03E76	338	30	1	Hsx	1	A								
23 Jul	S04E62	339	30	1	Hax	1	A								
24 Jul	S03E48	340	40	8	Hax	3	A								
25 Jul	S04E37	338	50	7	Cso	4	B	2							
26 Jul	S04E23	339	80	2	Hsx	1	A				1				
27 Jul	S03E08	340	90	3	Hsx	3	A								
28 Jul	S03W06	341	100	3	Cso	2	B								
29 Jul	S03W19	341	70	2	Hsx	1	A						1		
30 Jul	S03W33	342	80	2	Dso	4	B		1		1				
31 Jul	S03W47	342	70	2	Cso	3	B				1				
01 Aug	S03W62	344	70	2	Cso	3	B		1		1				
02 Aug	S03W77	346	70	2	Cso	3	B								
03 Aug	S03W90	346	40	2	Hsx	1	A								
								2	2	0	4	0	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 341

		Region 3765													
23 Jul	S11E74	327	120	2	Hsx	1	A								
24 Jul	S12E59	329	110	2	Hsx	1	A								
25 Jul	S11E45	330	60	2	Hsx	1	A				1				
26 Jul	S12E33	331	120	3	Hsx	1	A								
27 Jul	S12E20	328	180	7	Dso	11	BG	1	1		4		1		
28 Jul	S11E07	328	380	7	Dkc	15	BGD						1		
29 Jul	S11W07	329	460	8	Dkc	19	BGD	2			2	2			
30 Jul	S11W21	330	480	8	Dkc	29	BGD				1				
31 Jul	S11W33	328	450	11	Ekc	28	BGD				1				
01 Aug	S11W47	329	450	11	Ekc	28	BGD		2		8				
02 Aug	S11W61	330	450	11	Ekc	28	BGD	3	2		5				
03 Aug	S11W76	332	140	6	Dai	7	BG	1			3				
04 Aug	S13W92	334	60	9	Hsx	1	A								
								7	5	0	25	2	2	0	0

Still on Disk.
Absolute heliographic longitude: 328

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3766												
24 Jul	S08E58	330	30	5	Cro	6	B				2				
25 Jul	S08E51	324	10	5	Bxo	5	B	1							
26 Jul	S07E28	326	60	7	Cso	11	B				4				
27 Jul	S07E19	329	130	8	Dso	11	B		1		1	1			
28 Jul	S07E04	331	150	8	Dac	13	B	2	3		6				
29 Jul	S07W11	333	200	11	Eai	23	BGD	3		1	7				
30 Jul	S07W25	334	230	12	Eai	26	BG	3	3		10	1			
31 Jul	S07W40	335	220	13	Eai	26	BG				5				
01 Aug	S07W55	337	180	13	Eai	21	BG				3				
02 Aug	S07W70	339	140	13	Eai	16	BG		2		3				
03 Aug	S07W83	339	160	11	Eai	7	BG	1	1		2				
								10	10	1	43	2	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 331

			Region 3767												
25 Jul	S09E57	318	60	4	Cao	5	B								
26 Jul	S10E47	319	160	9	Dso	9	B				1				
27 Jul	S10E30	318	220	10	Dso	10	B	2	1		4	2			
28 Jul	S11E19	316	200	7	Dsi	10	BGD	1			5				
29 Jul	S09E04	318	140	7	Dai	15	B	3			3				
30 Jul	S09W10	319	120	7	Cao	15	B								
31 Jul	S09W24	319	130	6	Dai	15	BD		1		4	1			
01 Aug	S09W38	320	130	6	Dai	15	BD				2				
02 Aug	S09W52	321	130	6	Dai	15	BD								
03 Aug	S09W65	321	200	5	Dai	13	BG								
04 Aug	S09W78	320	80	2	Hsx	1	A	1							
								7	2	0	19	3	0	0	0

Still on Disk.
Absolute heliographic longitude: 318

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3768												
26 Jul	S16W00	121	10	2	Axx	2	A								
27 Jul	S17W16	4	20	5	Bxo	6	B								
28 Jul	S16W29	4	200	9	Dai	10	B		1		3	3			
29 Jul	S16W43	5	180	12	Eai	18	BG	1	2		9				
30 Jul	S16W57	6	200	13	Eac	20	BGD				6				
31 Jul	S16W71	6	450	16	Fkc	22	BGD		2		11				
01 Aug	S16W85	7	500	16	Fkc	24	BGD	1	3		10	1			
								2	8	0	39	4	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 121

			Region 3769												
26 Jul	N22E78	283	100	4	Hsx	1	A								
27 Jul	N23E60	285	100	9	Hsx	1	A								
28 Jul	N23E49	286	100	4	Hsx	1	A								
29 Jul	N20E35	287	80	3	Cso	1	B								
30 Jul	N22E22	287	80	3	Hsx	3	A				2				
31 Jul	N22E10	285	80	2	Hsx	1	A				1				
01 Aug	N22W04	286	80	2	Hsx	1	A								
02 Aug	N22W18	287	80	2	Hsx	1	A								
03 Aug	N22W29	285	100	2	Hsx	1	A								
04 Aug	N23W42	284	110	2	Hsx	3	A	1				1			
								1	0	0	3	1	0	0	0

Still on Disk.
Absolute heliographic longitude: 286

			Region 3770												
28 Jul	N07E08	326	200	8	Dai	10	BG	1			2				
29 Jul	N07W05	327	240	7	Dai	15	BD	1			5				
30 Jul	N07W19	328	260	8	Dho	12	BD				5				
31 Jul	N07W30	325	340	8	Dho	12	BD	2			3				
01 Aug	N07W45	327	310	8	Dho	12	BD	1	1		1				
02 Aug	N07W60	329	270	8	Dho	10	BD								
03 Aug	N07W75	331	260	8	Dho	5	BD	2	4		4				
04 Aug	N08W86	328	130	13	Cso	2	B								
								7	5	0	20	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 327

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3771												
29 Jul	N02W43	5	10	1	Axx	1	A								
30 Jul	N01W58	7	10	3	Axx	5	A								
31 Jul	N01W73	7	plage												
01 Aug	N01W88	10	plage												
								0	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 5

			Region 3772												
29 Jul	S25E73	250	plage						2						
30 Jul	S25E59	250	170	9	Dai	9	B		1		4		1		
31 Jul	S25E48	247	240	12	Eai	12	B	1	1		13	3			
01 Aug	S25E34	248	240	12	Eac	12	BGD	1	1		10	1			
02 Aug	S25E20	249	350	13	Ekc	12	BGD	2	2		5				
03 Aug	S25E06	250	380	14	Ekc	23	BGD				1				
04 Aug	S25W07	249	420	14	Ekc	21	BGD				1				
								4	7	0	34	4	1	0	0

Still on Disk.
Absolute heliographic longitude: 250

			Region 3773												
30 Jul	S06W43	352	30	3	Cro	8	B	1			1				
31 Jul	S06W58	353	30	3	Cro	8	B		1						
01 Aug	S06W73	355	20	3	Bxo	3	B		1						
02 Aug	S06W88	357	plage						1		2				
								1	3	0	3	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 352

			Region 3774												
31 Jul	S06E70	225	250	12	Eki	2	BG		4		1				
01 Aug	S06E55	227	250	12	Eki	2	BG	1	4		7				
02 Aug	S06E40	229	250	12	Eki	2	BG	1			3				
03 Aug	S05E27	229	350	11	Ekc	19	BG	1	1		1		1		
04 Aug	S10E14	228	370	14	Ekc	31	BGD								
								3	9	0	12	0	1	0	0

Still on Disk.
Absolute heliographic longitude: 228

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 3775												
31 Jul	N17E60	234	40	4	Cso	4	B								
01 Aug	N17E46	236	40	4	Cso	4	B								
02 Aug	N17E32	237	40	6	Dac	6	BG		1		1				
03 Aug	N17E18	238	120	8	Dai	12	BG		1						
04 Aug	N18E05	237	120	8	Dai	10	BG								
								0	2	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 237

			Region 3776												
01 Aug	N10E34	247	30	5	Cro	4	B								
02 Aug	N10E20	249	30	7	Cro	4	B								
03 Aug	N10E06	250	10	1	Axx	1	A								
04 Aug	N09W07	249	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 250

			Region 3777												
02 Aug	S09E61	207	10	1	Axx	1	A				1				
03 Aug	S09E48	208	20	5	Cso	7	B		1		1				
04 Aug	S10E35	207	70	10	Cao	2	B								
								0	1	0	2	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 207

			Region 3778												
02 Aug	S18W49	317	10	4	Bxo	3	B								
03 Aug	S18W61	317	plage												
04 Aug	S18W75	317	plage												
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 317

			Region 3779												
04 Aug	S01E24	218	70	2	Dao	4	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 218

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Region 3780													
04 Aug	S10E71	171	190	5	Dai	7	B	1	2		2				
								1	2	0	2	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 171

		Region 3781													
04 Aug	N15E80	163	210	3	Hax	2	A	1	2						
								1	2	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 163

Preliminary Report and Forecast of Solar Geophysical Data (The Weekly)

Published every Monday by the Space Weather Prediction Center.

U.S. Department of Commerce
NOAA / National Weather Service
Space Weather Prediction Center
325 Broadway, Boulder CO 80305

Notice: The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned. Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

The Weekly has been published continuously since 1951 and is available online since 1997.

https://www.swpc.noaa.gov/products/weekly-highlights-and-27-day-forecast -- Current
ftp://ftp.swpc.noaa.gov/pub/warehouse -- Online archive from 1997
https://www.ngdc.noaa.gov/stp/satellite/goes-r.html -- NCEI GOES data textarchive
https://www.swpc.noaa.gov/products/solar-cycle-progression -- Solar Cycle Progression web site
https://www.swpc.noaa.gov/content/contact-us -- Contact and Copyright information
https://www.swpc.noaa.gov/sites/default/files/images/u2/Usr_guide.pdf -- User Guide